

PIEZOELECTRIC CERAMIC PRODUCTION METHOD AND PIEZOELECTRIC
ELEMENT PRODUCTION METHOD

ABSTRACT

5 An active matrix drive type liquid crystal display
element capable of preventing deterioration of display
capability caused by a stripe domain, and a projection
type display device using the liquid crystal display
element, by which there is provided a projection type
10 display device comprising a light source; a light
convergence optical system for guiding a light emitted
from said light source to a liquid crystal display
element; and a projection optical system for enlarging
and projecting a light subjected to light modulation by
15 said liquid crystal display element; wherein the liquid
crystal display element is configured by holding a liquid
crystal layer between a pair of substrates arranged to
face to each other, and a twisted nematic type liquid
crystal material used in the liquid crystal layer
20 satisfies dielectric constant anisotropy $\Delta\epsilon$ of $0 < \Delta\epsilon < 8$
and twist elasticity modulus K_{22} of $K_{22} > 6.0$ pN when the
refractive index anisotropy Δn is $0.16 \leq \Delta n \leq 0.18$ and
satisfies dielectric constant anisotropy $\Delta\epsilon$ of $0 < \Delta\epsilon <$
13 and twist elasticity modulus K_{22} of $K_{22} > 3.0$ pN when
25 the refractive index anisotropy Δn is $0.18 \leq \Delta n \leq 0.20$.